## THAT WHICH IS CLAIMED:

1. An apparatus for evaluating a patient's laryngeal cough reflex function, said apparatus comprising:

a nebulizer capable of being actuated to atomize a cough-inducing substance;

a switch associated with said nebulizer, said switch responsive to actuation of the nebulizer; and

a connection between said switch and an EMG machine to thereby transmit a signal to activate the EMG machine responsive to said switch.

2. The apparatus of claim 1, wherein said connection comprises at least one wire having a first end connected to said electrical switch and having a second end connectable to an EMG machine.

3. The apparatus of claim 1, wherein said connection is a wireless connection.

4. The apparatus of claim 1, wherein said connection comprises light to carry a signal.

5. The apparatus of claim 1, wherein said connection comprises infrared light to carry a signal.

6. The apparatus of claim 1, wherein the cough-inducing substance contains one or more salts of tartaric acid.

7. The apparatus of claim 1, wherein the cough-inducing substance is made with up to approximately 20% tartaric acid.

8. The apparatus of claim 1, wherein the nebulizer is inhalation actuated to atomize the cough-inducing substance.

9. An apparatus for evaluating a patient's laryngeal cough reflex function, said apparatus comprising in combination:

a nebulizer capable of being actuated to atomize a cough-inducing substance contained therein;

an electrical switch associated with said nebulizer and responsive to actuation of said nebulizer;

an EMG machine having one or more sensing electrodes connectable to the patient for sensing muscular electrical activity; and

a connection between said switch and said EMG machine to thereby activate the EMG machine responsive to said switch.

10. The apparatus of claim 9, wherein said connection comprises at least one wire having a first end connected to said electrical switch and having a second end connectable to said EMG machine.

11. The apparatus of claim 9, wherein said connection is a wireless connection.

12. The apparatus of claim 9, wherein said connection comprises light to carry a signal.

13. The apparatus of claim 9, wherein said connection comprises infrared light to carry a signal.

14. The apparatus of claim 9, wherein the cough-inducing substance contains one or more salts of tartaric acid.

15. The apparatus of claim 9, wherein the cough-inducing substance contains a composition made with up to approximately 20% tartaric acid.

16. The apparatus of claim 9, wherein the nebulizer is inhalation actuated to atomize the cough-inducing substance.

17. A method of evaluating a patient's laryngeal cough reflex function, the method comprising:

providing a nebulizer containing a cough-inducing substance, the nebulizer being associated with a switch responsive to actuation of the nebulizer;

operatively connecting the nebulizer associated switch with an EMG machine so as to activate the EMG machine responsive to the switch;

connecting one or more sensing electrodes from the EMG machine to a position on the patient sufficiently close to at least one muscle which contracts to cause the patient to cough, so as to sense electrical activity in the at least one muscle;

inducing a cough in the patient by actuating the nebulizer so as to direct atomized cough-inducing substance into the patient's throat;

sensing electrical activity generated in the at least one muscle responsive to the induced cough; and

determining elapsed time between response of the nebulizer switch and the electrical activity sensed in the at least one muscle.

18. The method of claim 17, wherein the cough-inducing substance contains one or more salts of tartaric acid.

19. The method of claim 17, wherein the cough-inducing substance is made with up to approximately 20% tartaric acid.

20. The method of claim 17 wherein the at least one muscle of the patient consists of an external abdominal oblique muscle.

21. The method of claim 17, wherein inducing a cough further comprises contacting the patient's larynx with the atomized cough-inducing substance.

22. The method of claim 17, wherein an elapsed time in a range of between approximately 15 to 21 milliseconds indicates a normal laryngeal cough reflex.

23. The method of claim 17, wherein an elapsed time in a range of greater than approximately 21 milliseconds indicates an impaired laryngeal cough reflex.